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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,154	09/22/2003	Mie Yoshino	243006US2	5775

22850 7590 01/27/2005

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EXAMINER

TRAN, HOAN H

ART UNIT	PAPER NUMBER
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2852

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/665,154

Applicant(s)

YOSHINO ET AL.

Examiner

Hoan H. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 16 is/are allowed.
- 6) ☒ Claim(s) 1-13, 15 and 17-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/29/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The abstract of the disclosure is objected to because:

- Line 5 of the abstract, change “electrostaically” to --electrostatically--.
- It is not limited to a single paragraph.

Correction is required. See MPEP § 608.01(b).

- The disclosure is objected to because of the following informalities:
- Page 22, line 16, replace “law” with --low--.
- Page 23, line 7, replace “form” with --from--.
- Page 31, line 11, replace “thought” with --though--.
- Page 37, line 21, replace “form” with --from-.

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

4. Claims 1, 5, 9 and 27 are objected to because of the following informalities:
 - Claim 1, line 6, replace “electrostaically” with --electrostatically--.

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- Claim 5, line 2, replace “surface” with --layer--.
- Claim 9, line 2, replace “a” (second occurrence) with --the --.
- Claim 27, line 1, replace “apparatus” with --method--.
- Claim 27, line 4, replace “device” with --body--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2 and 6-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakashima et al. [‘147]

Nakashima et al. disclose a liquid type image forming apparatus [Fig. 1; Col. 4, lines 50-51] comprising a latent image carrier [10], developing devices [14] for developing the latent image with liquid developer containing a toner in a carrier liquid [Col. 4, lines 45-49], an intermediate transfer body [15] having an elastic layer and a surface layer containing a fluorine compound [Fig. 20; Col. 13, line 47 to Col. 15, line 42], a transfer device [19] and a heating device [18] for heating the intermediate transfer body.

Regarding claim 6, the heating device comprising a heating roller which is heated from a heat source disposed internally and rotates with contacting to the intermediate transfer body [Fig. 4; Col. 6, lines 20-34].

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Regarding claim 7, Fig. 5 shows the heat device heating the intermediate transfer body without contacting.

Regarding claim 8, Fig. 8 shows the heating device comprising a heating belt.

7. Claims 10, 12, 15, 18-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Berkes et al. ['657]

Berkes et al. disclose an image forming apparatus [Fig. 1] comprising an image carrier [1], an intermediate transfer body [29], a developing device [26] containing liquid developer which is made of a carrier liquid and a toner containing resin and pigment [Col. 3, lines 62-66], a primary transfer device [28], a secondary transfer device [33] a heating mechanism [34], a cleaning member [Col. 6, lines 33-47] and a brush roller [40] to buff the surface of the intermediate transfer body and applying a thin coat of releasing agent to the surface of the intermediate transfer body [Col. 5, lines 13-37].

Regarding claims 27, the claimed method steps are inherent from the product structure.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakashima et al. in view of Tokutake et al. ['861]

Nakashima et al., as discussed above, disclose the claimed invention except for the elastic layer of the intermediate transfer body containing urethane resin.

Tokutake et al. disclose an image forming apparatus comprising an intermediate transfer body [70] having an elastic layer containing urethane resin [Col. 6, lines 55-67].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the intermediate transfer body disclosed by Nakashima et al. with an elastic layer containing urethane resin as taught by Tokutake et al. for the purpose of reducing speed fluctuations of the intermediate transfer body.

11. Claims 9, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berkes et al. in view of Nakashima et al.

Berkes et al., as discussed above, disclose the claimed invention except for a cooling mechanism.

Nakashima et al. disclose an image forming apparatus comprising a cooling mechanism [Figs. 6 & 7; Col. 7, lines 40-43].

It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to provide the image forming apparatus disclosed by Berkes et al. with a cooling mechanism as taught by Nakashima et al. for the purpose of cooling the surface of the intermediate transfer body.

Regarding claim 11, Nakashima et al. disclose the use of a felt roller made of a non-woven fabric member for removing solid content [Col. 13, lines 37-46].

12. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Berkes et al. in view of Watanabe ['463]

Berkes et al., as discussed above, disclose the claimed invention except for a metal blade.

Watanabe discloses an image forming apparatus comprising a metal blade [Col. 10, lines 27-40].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the image forming apparatus disclosed by Berkes et al. with a metal blade as taught by Watanabe for the purpose of being able to adjust the friction between the blade and the intermediate transfer body.

Allowable Subject Matter

13. Claims 14 and 16 are allowed.

Contact Information

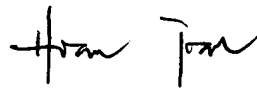
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (571) 272-2141. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (571) 272-2136. The central office fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

HHT
Jan. 22, 2005

A handwritten signature in black ink, appearing to read 'Hoan Tran', with a stylized flourish at the end.

HOAN TRAN
PRIMARY EXAMINER